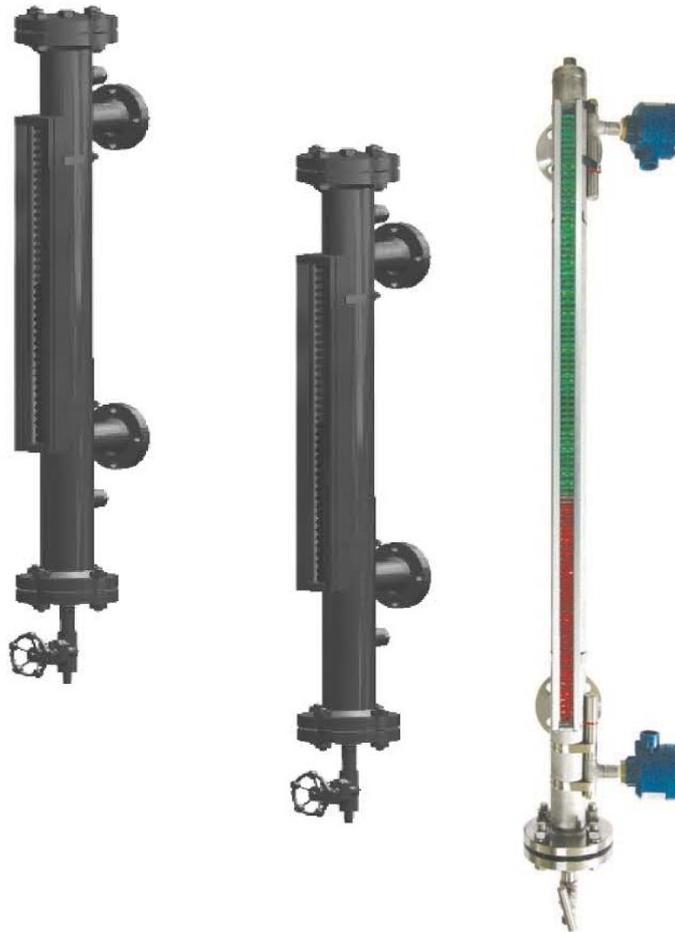


INSTRUCTION MANUAL

ITEM : LEVEL GUAGE
(MAGNETIC FLOAT TYPE)



WISE[®] WISE Control Inc.
www.wisecontrol.com

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1. INTRODUCTION

The Level Gauge manufactured by WISE CONTROL INC is a product manufactured in compliance with the specifications of clients. This product should be stored in the proper place. And it should surely comply with requirements such as various kinds of document, report, and instruction manual in order to maintain the optimum status of use during the period that it is used.

2. USE

It can be used for observing the level of liquid by a change in color of attached indicator by using the magnetic force of built-in float within the column after making liquid inside a container such as tank flow into the Level Gauge Column attached to the outside of tank.

3. WARRANTY

In case of arbitrary modification, change, and repair, and damage caused because of not complying with the provisions of instruction manual when the product is used, the manufacturer doesn't take responsibility, and the warranty of product is also terminated.

4. CONFIRMATION NOTES BEFORE THE INSTALLATION

- 1) Check whether there is any damage to the product in transit before installation.
- 2) Check whether there is any foreign substance inside tank piping, flange, and so on.

5. MATTERS THAT REQUIRE ATTENTION IN THE OPERATION

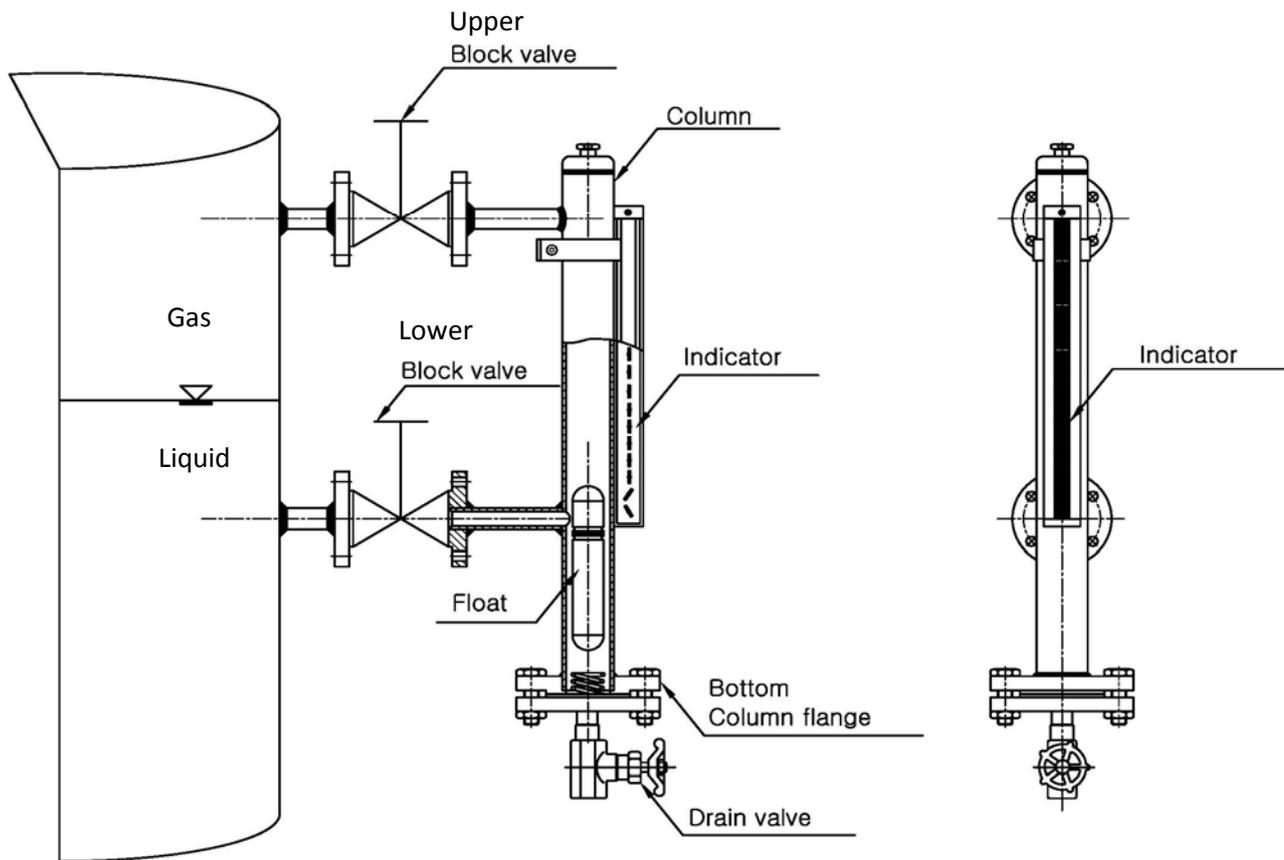
1) WARMMING UP

After a warm-up about 80 minutes until the temperature and pressure of tank and the operation condition of Level gauge becomes identical to each other, the upper block valve is slowly opened, and then fluid is made to minutely flow into the Level Gauge

by approximately half opening the lower block valve, and then a steady-state operation should be carried out in the condition that the temperature and pressure of tank is in equilibrium.

(Attention shall be paid to damage to the float in case of commissioning.)

- 2) In case of high temperature and pressure, fluid must not flow into the Level Gauge Column by opening the Block Valve fast. (Then, there is a risk that a float inside the gauge is dented or damaged due to the sudden shock). The float buoys up from the bottom of level gauge column with opening the upper block valve about a half turn in the condition that the upper and lower block valve is completely closed in the initial operation, and a change in the indicator is observed, and then the commissioning shall be carried out with slowly opening the lower valve after completely opening the upper valve when Nor.Level is indicated.



3) In case the indicator doesn't indicate a level after the inflow of fluid, check the following.

- There are cases where it doesn't float if the actual specific gravity of fluid is low.
- Check whether there is any damage to the float due to the sudden inflow of fluid.
- Check whether there is any foreign substance between the inside of Level Gauge Column and float.

6. MAINTENANCE OF THE LEVEL GAUGE

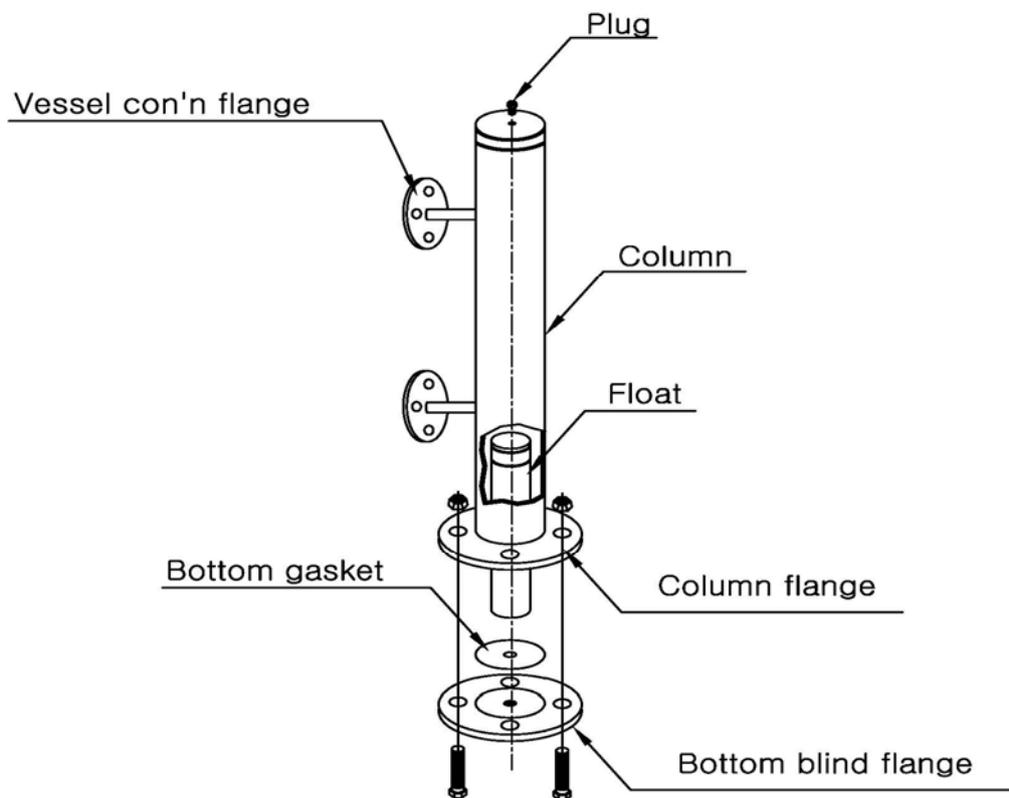
There will be no much difficulty in use and maintenance only if there is no damage to the float due to the occurrence of malfunction during operation

It should be periodically replaced, if the color of indicator is changed.

Disassemble and assemble the level gauge as follows, in case disassembly and assembly is required for the replacement of float, the internal cleaning of Level Gauge Column, and so on.

- 1) Close the upper and lower block valve.
- 2) Remove internal pressure and fluid by opening the drain valve.
(Be careful not to get burnt by reason that level gauge is also hot in case fluid is very hot.)
- 3) Take out float after disassembling the blind flange by loosening the bolt & nut of bottom blind flange.
Then, be careful that float doesn't drop to the ground.

- 4) Check whether anything is wrong with the taken out float.
- 5) It doesn't matter though the float is used again after sweeping the float clean in case there's nothing wrong with the float.
- 6) It is assembled in reverse order of disassembly.
 Insert the float into the inside of level gauge, and adjust bottom blind flange, and then fasten bolt & nut.
 At this time, surely, a newly substituted gasket shall be used.



7. STORAGE METHOD AND RETURN / PACKAGING OF PRODUCT

- 1) The product shall be made not to be exposed to moisture, dust, and other pollutants.
- 2) The product shall be so kept that it is not exposed to vibration or shock.
- 3) In case of return for the purpose of repair, the original packaging or safe packaging method shall be used, and the related documents shall be also returned together with it.
- 4) The product shall not to be exposed to moisture, dust, and other pollutants in transit.
- 5) The product shall be so packaged that it is not exposed to vibration or shock in transit.
- 6) The product damaged in transit is to be recorded in the document. And all compensatio according to the delay of installation can be claimed against the transport company.